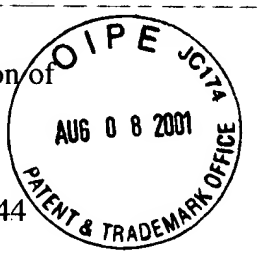
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#5



In re Patent Application of

JELBERT

Atty. Ref.: 550-225

Serial No. 09/837,544

Group: 2152

Filed: April 19, 2001

Examiner:

For: MODIFYING A DATA FILE REPRESENTING A DOCUMENT WITHIN A LINKED HIERARCHY OF DOCUMENTS

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Assistant Commissioner for Patents
Washington, DC 20231

August 8, 2001

SUBMISSION OF PRIORITY DOCUMENTS

Sir:

It is respectfully requested that this application be given the benefit of the foreign filing date under the provisions of 35 U.S.C. §119 of the following, a certified copy of which is submitted herewith:

Application No.	Country of Origin	Filed
9910683.3	GREAT BRITAIN	7 May 1999
9910684.1	GREAT BRITAIN	7 May 1999
9910679.1	GREAT BRITAIN	7 May 1999
9910682.5	GREAT BRITAIN	7 May 1999
9910685.8	GREAT BRITAIN	7 May 1999

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____

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549623

The Patent Office
Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.

Signed

Dated 14 MAY 2001

Patents Form 1/77

Patents Act 1977
(Rule 16)

The Patent Office

10MAY99 E445765-27 D02246
P01/7700 0.00 - 9910683.3

D YOUNG & CO

THE PATENT OFFICE
K
-7 MAY 1999
RECEIVED BY HAND

Request for a grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road
Newport
Gwent NP9 1RH

1. Your reference — P/6836.GB — 07 MAY 1999

2. Patent application number *(The Patent Office will fill in this part)* — 07 MA — 9910683.3

3. Full name, address and postcode of the or of each applicant *(underline all surnames)*

Argo Interactive Limited
7 Dukes Court
Chichester
West Sussex
PO19 2FX

Patents ADP number *(if you know it)* 76067340 0J

If the applicant is a corporate body, give the country/state of its incorporation — United Kingdom

4. Title of the invention — Data Processing Apparatus

5. Name of your agent *(if you have one)* — D YOUNG & CO

"Address for service" in the United Kingdom to which all correspondence should be sent *(including the postcode)*

21 NEW FETTER LANE
LONDON
EC4A 1DA

Patents ADP number *(if you have one)* — 59006

6. If you are declaring priority from one or more earlier patent applications, give the country and date of filing of the or each of these earlier applications and (if you know it) the or each application number

Country	Priority application number *(if you know it)*	Date of filing *(day/month/year)*

7. If this application is divided or otherwise derived from an earlier UK application, give the number and filing date of the earlier application

Number of earlier application	Date of filing *(day/month/year)*

8. **Is a statement of inventorship and of right to grant of a patent required in support of this request?** *(Answer 'Yes' if:*
a) any applicant named in part 3 is not an inventor, or
b) there is an inventor who is not named as an applicant, or
c) any named applicant is a corporate body.
See note (d))

Yes

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9. **Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document**

Continuation sheets of this form	0
Description	3
Claims(s)	0
Abstract	0
Drawing(s)	0

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10. **If you are also filing any of the following, state how many against each item.**

Priority documents	0
Translations of priority documents	0
Statement of inventorship and right to grant of a patent *(Patents Form 7/77)*	0
Request for preliminary examination and search *(Patents Form 9/77)*	0
Request for substantive examination *(Patents Form 10/77)*	0
Any other documents *(please specify)*	0

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11. **I/We request the grant of a patent on the basis of this application.**

Signature

D Young & Co

D YOUNG & CO
Agents for the Applicants

Date

07 May 1999

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12. **Name and daytime telephone number of the person to contact in the United Kingdom**

N A J Robinson

01703 634816

Warning

After an application for a patent has been filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed if it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission from the Patent Office unless an application has been filed at least 6 weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.

Notes

a) If you need help to fill in this form or you have any questions, please contact the Patent Office on 01645 500505

b) Write your answers in capital letters using black ink or you may type them

c) If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.

d) If you answered 'Yes' Patents Form 7/77 will need to be filed.

e) Once you have filled in the form you must remember to sign and date it.

f) For details of the fee and ways to pay please contact the Patent Office.

Provisional Patent Application

P/6336.43

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A System for Optimising Hypertext Links

Overview:

A majority of information currently available in HTML and other mark-up languages has been designed for display on a Desktop Computer Monitor of a typical resolution of 640 by 480 or 1024 by 768 pixels. A typical small screen device only has a resolution of 120 by 90. This system has been designed to re-process the original document into a format that will be easier to interpret and understand on a small screen device.

This system has been designed for the purposes of converting information published in a hypertext mark-up language, to a format more suitable for small screen device. In a typical installation, the hypertext language would be HTML and the destination device would be PDA (Personal Digital Assistant) or Mobile phone.

The system can be used on any mark-up language and work both locally as well as across a network.

Problem:

When viewing a hypertext document, it is often the case that the hypertext document can contain a high number of hypertext links to other hypertext documents. In many circumstances, only a small subset of these would actually be used, and the rest would be redundant.

Removing these redundant links would increase the navigability of the hypertext document by providing the user with the links that the user would want.

Solution:

Argo proposes a system of computer software, through which users are required to fetch hypertext documents that they wish to read. Typically, this is in the form of an intermediate 'proxy server' but a stand-alone mode of operation can also be envisaged. The system processes hypertext pages as they are transferred from the storage location to the reader, modifying parts, recording what it has found, and performing other tasks.

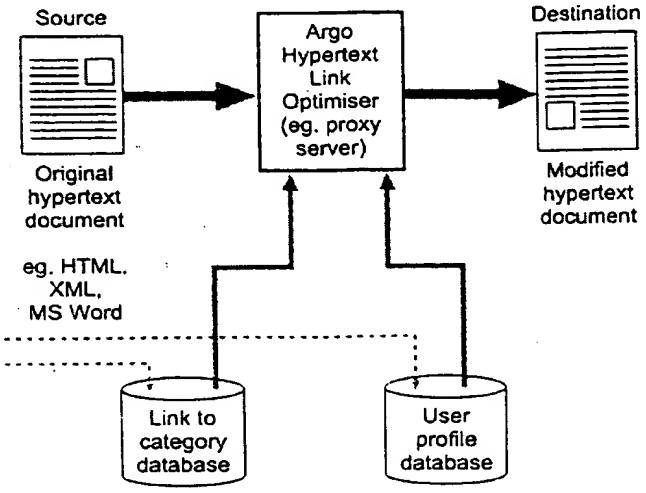
Hypertext documents normally contain links to further hypertext information allowing traversal through information. Argo's system analyses these links and using a variety of techniques removes hypertext links from the document.

Some suggested techniques are:

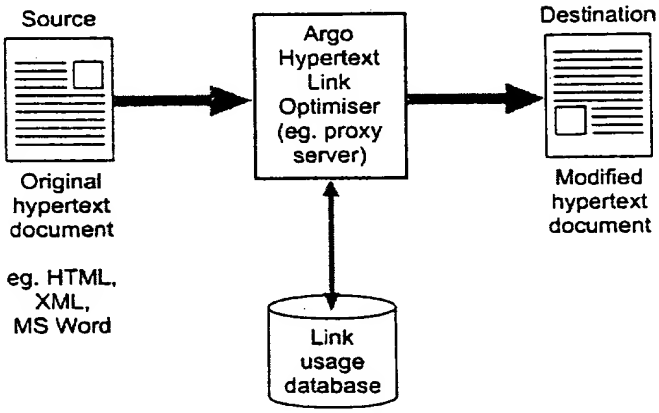
- Removal based on the link's category, and the user's profile;
- Removal based on previous users' selections through the hypertext document;
- Removal based on a global setting;

A combination of the above techniques can also be used.

For the first technique, if the user's profile indicates that they are interested in transport and bird watching, then links relevant to transport and bird watching are kept, while links to non-transport and non-bird watching related hypertext documents are removed. This system is shown in the following diagram:

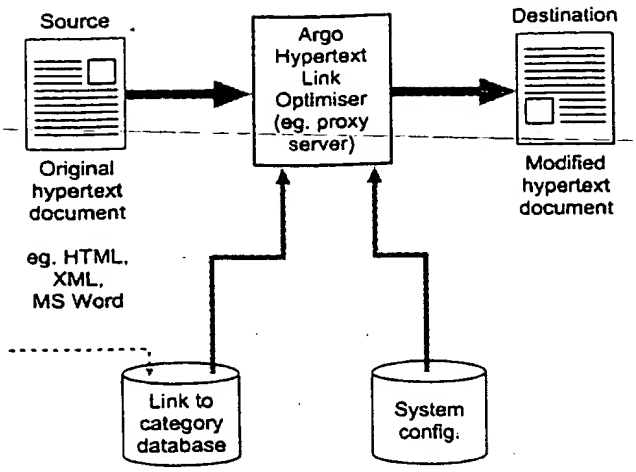


In the second technique, a learning algorithm such as a genetic algorithm or a neural network could be employed to learn what links users are more likely to visit. Such a system would limit the number of hypertext links, and display those that are most commonly chosen. A hypertext document that has not been viewed before would have links chosen at random. If the user wishes to see links that are not present, then the user can inform the system to choose different links. When a user chooses a hypertext link, the system stores that, and uses the information the next time a user visits that hypertext document. In order not to stagnate the links (ie. the user is never presented with the same links repeatedly), the system could choose the most common links, plus a small number randomly chosen from the rest. This is shown in the following diagram:



In the third technique, a system manager could configure the system to emphasise certain links, using a system such as automatic categorisation. This is shown in the following diagram:

A System for optimising Hypertext information



09/837,544